

**Allotment Assessment and Evaluation Report for
New Mexico Standards and Guidelines for Public Land Health
Piñon Bluff (#962) – August 10, 2010**

Permittee		<u>Authorization Number</u> 3001638		
Livestock Use	Preference AUMs	<u>Allotment</u> 00962	<u>Active</u> 22	<u>Suspended</u> 0
	Period of Use / Kind of livestock	<u>Allotment</u> Piñon Bluff	<u>Number / Kind</u> 2 Cattle	<u>Season of Use</u> 03/01 – 02/28
	Percent Public Land	AUMs are authorized at 100% public land		
Allotment Profile	Physical Description	<p>Allotment 962 is located approximately 20 miles southeast of Wagon Mound in San Miguel County, New Mexico. Elevation on this allotment is roughly between 5,700 to 5,900 feet. Landforms on the allotment include; uplands, escarpments and arroyos.</p> <p>Four soil types are identified within the BLM lands in this allotment;</p> <p>Bernal-Rock outcrop association, gently sloping. These soils consist of sandy loams with rooting depths between 8 to 20 inches. Parent materials of residuum derived from sandstone comprise these soils. Average annual precipitation ranges between 14 and 18 inches. Hazards for erosion are moderate. Vegetation is characterized by blue grama, sideoats grama, little bluestem, New Mexico feathergrass, piñon and juniper.</p> <p>Carnero-Patri association, undulating. These soils consist of silt and clay loams, with rooting depths over 20 to over 60 inches. Parent materials of residuum derived from sandstone and modified with eolian material and limestone comprise these soils. Average annual precipitation ranges between 14 and 18 inches. Hazards for erosion are moderate. Vegetation is characterized by blue grama, sideoats grama, galleta and western wheatgrass.</p> <p>Tuloso-Rock outcrop-Sombordoro association, steep. These soils consist of stony sandy and stony loams with rooting depths ranging from 8 to 20 inches. Parent materials are primarily derived from sandstone. Average annual precipitation is about 16 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by pinyon, juniper, blue grama, hairy grama, sideoats grama, little bluestem and pinyon ricegrass.</p> <p>Tuloso-Sombordoro-Rock outcrop complex moderately sloping. These soils consist of stony sandy and stony loams</p>		

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	Land Status Acreage	<table><tr><td><u>BLM</u></td><td><u>State</u></td><td><u>Private</u></td></tr><tr><td>120</td><td>0</td><td>0</td></tr></table>	<u>BLM</u>	<u>State</u>	<u>Private</u>	120	0	0																
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	Management Objectives	The allotment is under a ‘Custodial’ (‘C’) management category. ‘C’ category allotments have evidence of a “not apparent” to “upward” long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.																						
	Key Forage Species	blue grama, hairy grama, sideoats grama, little bluestem																						
	Grazing System	Rotational with private lands.																						
Current Conditions / Management	Actual Use	No actual use has been submitted for this allotment; use reflected below is billed AUMs.																						
		<table><tr><td><u>AUMs</u></td><td><u>Year</u></td></tr><tr><td>22</td><td>2010</td></tr><tr><td>22</td><td>2009</td></tr><tr><td>22</td><td>2008</td></tr><tr><td>22</td><td>2007</td></tr><tr><td>non-use</td><td>2006</td></tr><tr><td>22</td><td>2005</td></tr><tr><td>22</td><td>2004</td></tr><tr><td>22</td><td>2003</td></tr><tr><td>22</td><td>2002</td></tr><tr><td>22</td><td>2001</td></tr></table>	<u>AUMs</u>	<u>Year</u>	22	2010	22	2009	22	2008	22	2007	non-use	2006	22	2005	22	2004	22	2003	22	2002	22	2001
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	Utilization	Due to the lack of staff utilization studies have not been conducted. During the assessment visit it was determined that the allotment receiving very slight to slight amounts of utilization.																						
	Climate	<p>The past water year (Oct. 1, 2009 – Sept. 30, 2010) the average temperature has been near average (0 to 1 degrees Fahrenheit below average) and precipitation has been below average (3 to 6 inches). The winter precipitation was near average (0 – 1.5 inches below normal) and was cooler (5 - 6 degrees Fahrenheit below average). The spring was drier, but cooler (0 – 0.75 inches below normal and 0 - 1 degrees Fahrenheit below average, respectively) This should provide for near normal plant growth for cool season plants. The summer was below normal (1.5 – 3 inches below normal) and warmer (2 - 3 degrees above normal) which should provide near normal growth for warm season plants.</p> <p>Global climate change resulting from increasing atmospheric CO₂ levels may accelerate rates of plant extinction and result in shifts in ecosystem structure (species diversity) and function. We anticipate that our monitoring efforts will track vegetation shifts allowing for management modifications to address local</p>																						

		range impacts resulting from global climate change.																																								
	Trend	<p>No long term trend plots had been established. During the evaluation process a plot was established. Full findings are located in the Taos Field Office in the allotment file, but are summarized below.</p> <table><tr><th>Plot 1</th><th>2010</th></tr><tr><th>Soil Surface</th><th>Ground Cover (%)</th></tr><tr><td>Bare Ground</td><td>69</td></tr><tr><td>cryptogams</td><td>0</td></tr><tr><td>gravel</td><td>0</td></tr><tr><td>rock</td><td>0</td></tr><tr><td>litter</td><td>12</td></tr><tr><td>BOGR – blue grama</td><td>15</td></tr><tr><td>PLJA – galleta</td><td>1</td></tr><tr><td>BODA – buffalograss</td><td>1</td></tr><tr><td>MUTO – ring muhly</td><td>1</td></tr><tr><td>GUSA – snakeweed</td><td>1</td></tr></table> <table><tr><th>Species Composition</th><th>Composition (%)</th></tr><tr><td>GUSA – snakeweed</td><td>22</td></tr><tr><td>PLJA – galleta</td><td>3</td></tr><tr><td>BOGR – blue grama</td><td>57</td></tr><tr><td>MUTO – ring muhly</td><td>8</td></tr><tr><td>BODA – buffalograss</td><td>1</td></tr><tr><td>JUMO - juniper</td><td>7</td></tr><tr><td>CYIM – cholla</td><td>1</td></tr></table>	Plot 1	2010	Soil Surface	Ground Cover (%)	Bare Ground	69	cryptogams	0	gravel	0	rock	0	litter	12	BOGR – blue grama	15	PLJA – galleta	1	BODA – buffalograss	1	MUTO – ring muhly	1	GUSA – snakeweed	1	Species Composition	Composition (%)	GUSA – snakeweed	22	PLJA – galleta	3	BOGR – blue grama	57	MUTO – ring muhly	8	BODA – buffalograss	1	JUMO - juniper	7	CYIM – cholla	1
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	Riparian	There are no riparian areas within this allotment.																																								
	Wildlife	<p>Seasonal home ranges in the allotment include those for deer, bear, cougar, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects.</p> <p>Deer are grazers; however there is little dietary overlap between deer and cattle. Best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.</p>																																								
	Threatened and Endangered Species	It is determined that there are no federally listed threatened or endangered or special status species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.																																								
Findings / Rationale for the New Mexico Standards for Public Land Health		A Rangeland Health Evaluation Matrix was completed on August 27, 2010. This evaluation matrix is from Technical Reference 1734-6 “Interpreting Indicators of Rangeland Health.” The actual matrix forms are available within the allotment file. Below is a summation of the information gathered by the on site evaluation. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic																																								

		<p>Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be $5(\text{score}) \times 10(\text{indicators}) = 50/50 \times 100 = 100\%$ similarity, or what is expected based on an Ecological Site Description.</p> <p>Soil and Site Stability Two indicators were deemed None to Slight, seven were deemed Slight to Moderate and one was deemed Moderate. Rating: 82%</p> <p>Hydrologic Function Two indicators were deemed None to Slight, seven were deemed Slight to Moderate and one was deemed Moderate. Rating: 82%</p> <p>Biotic Integrity Five indicators were deemed None to Slight, three were deemed Slight to Moderate and one was deemed Moderate. Rating: 89%</p> <p>Overall Rating: 84%</p>
	Upland Standard	<p><i>Upland ecological sites are in productive and sustainable condition within the capability of the site. Upland soils are stabilized and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The kind, amount and/or pattern of vegetation provides protection on a given site to minimize erosion and assist in meeting State and Tribal water quality standards.</i></p> <p>It was determined that this allotment is meeting the Upland Standard based on the above evaluation and information. Soils are intact with only slight departures from what is expected for this site.</p>
	Biotic Communities Standard	<p><i>Ecological processes such as hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status , threatened, and endangered species appropriate to site and species.</i></p> <p>It was determined that this allotment is meeting the Biotic Communities Standard based on the above evaluation and information. It was determined that all ecological processes are functioning as expected in this allotment.</p>
	Riparian Standard	<p><i>Riparian areas are in a productive, properly functioning and sustainable condition, within the capability of that site.</i></p> <p>The Riparian Standard does not apply due to the lack of riparian</p>

		areas within this allotment.
	Conclusion	The Upland and Biotic Communities Standards are being met and the Riparian Standard does not apply; therefore a Determination Document is not warranted. Continued monitoring will help establish future trend. It is recommended that the lease attached to this allotment be re-issued without any changes.

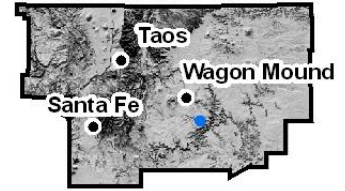
Consultation and Coordination

This Assessment and Evaluation Report has been sent or given to the affected permittee(s) / lessee(s), the interested publics and the following interdisciplinary team members for input and review:

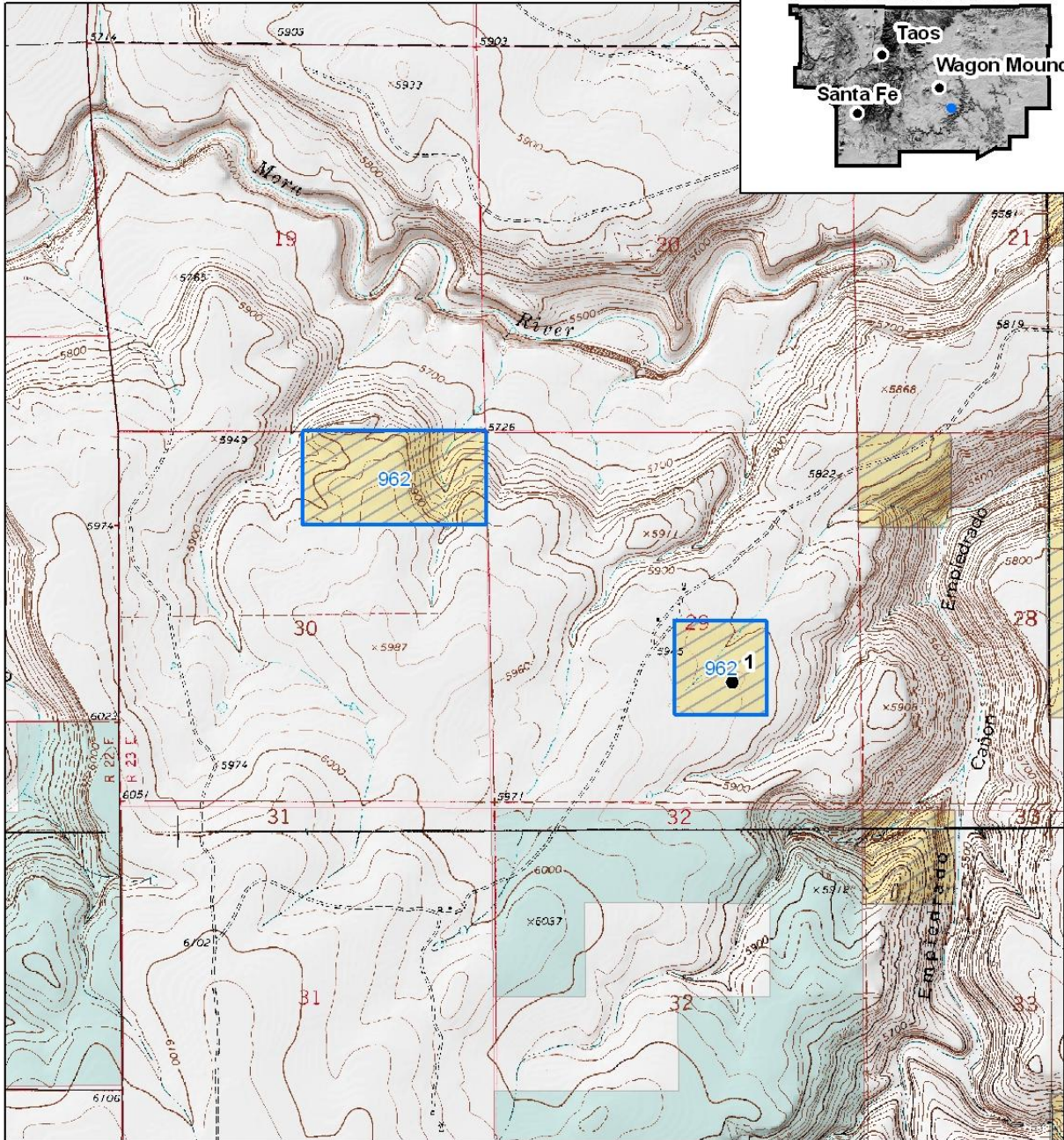
Merrill Dicks – Archeologist
 Scott Draney – Department of Game and Fish
 Greg Gustina – Fish Biologist
 Pam Herrera-Olivas – Wildlife Biologist
 Tami Torres – Outdoor Recreation Planner
 Derek Trauntvein – Rangeland Management Specialist
 Paul Williams – Archeologist
 Valerie Williams – Wildlife Biologist

This document was prepared by: Jacob Young – Rangeland Management Specialist

Taos Field Office



T18N



R22E

R23E



Piñon Bluff (962)



Legend

- Monitoring Plots
- Allotment Boundary
- ▨ Bureau of Land Management
- Private
- State

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Tuesday, February 1, 2011

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7.5' Topos; Cañon Ancho